PRESIDIO OF SAN FRANCISCO,
DISTRICT ENGINEER'S SHOPS & YARD
(Post Engineer's Shops & Yard)
(Buildings 280, 282-285, 288)
Golden Gate National Recreation Area
Bounded by Marine Dr. (on North & East), Lt. Jauss St. (on South), and parking lot (on West)
San Francisco
San Francisco County
California

HABS No. CA-2673

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
Western Region
Department of the Interior
San Francisco, California 94107

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HISTORIC AMERICAN BUILDINGS SURVEY

PRESIDIO OF SAN FRANCISCO, DISTRICT ENGINEER'S SHOPS & YARD
(Post Engineer's Shops & Yard)
(Buildings 280, 282-285, 288)

HABS No. CA-2273

Location: The District Engineer's Shops and Yard--Post Engineer's Shops and Yard are bounded by Marine Drive on the north and east, by Lieutenant Jauss Street on the south, and by a parking lot on the west, and are located in the extreme northeast comer of the Presidio of San Francisco, in the City and County of San Francisco, California.

U.S.G.S. San Francisco North Quadrangle (7.5), Universal Transverse Mercator Coordinates: 10. 548 580. 4184 230

Significance: From a single warehouse built in 1926, this part of the Presidio of San Francisco was transformed in 1942 into the District Engineer's shops and yards, the construction yard for the San Francisco District of the U.S. Army Corps of Engineers. With the beginning of World War II, the construction duties of the U.S. Army Corps of Engineers were greatly expanded, and compounds of shop buildings such as this one became an important part of the war effort.

From 1950 to the present, the Post Engineer and his staff have been located in this compound of buildings. Consisting of plumbing, electrical, carpentry, welding, sheet metal, paint, sign making, glass cutting, and entomology shops, plus a warehouse and offices, the Post Engineering complex provided a wide range of services which were necessary for the maintenance and operation of the Presidio. The staff of the Post Engineer has been responsible for building and altering buildings and performing thousands of repair jobs each year in the Presidio of San Francisco since December 1941, and have been located in this compound since 1950.

The six buildings in the complex which contribute to the Presidio's National Historic Landmark district are all utilitarian in appearance, with gable roofs, and exterior cladding of corrugated iron, horizontal

wood siding, or asbestos shingles. The paint scheme of white walls with red composition roofs is constant throughout the complex. The oldest building, 283, was built in 1926 as a warehouse and is also the largest building in the compound. Buildings 280, 284, 285, and 288 were built during 1942–1944, and their original purpose is not known. The other contributing building, 282, was built ca. 1952–1953, and with the other buildings, represents the consolidation of Post Engineering activities in one location after 1950.

Description:

The Post Engineer's shops and yards occupy a nearly rectangular compound of 4.4 acres in the extreme northeast corner of the Presidio of San Francisco. Thirteen buildings now make up the complex. Nine of these are grouped together in the middle and southern end of the compound and are all parallel or perpendicular to each other and the nearby streets in the Presidio. The remaining four buildings are in the northern end of the compound, and the three largest of these line up with the San Francisco Bay to the immediate north, and are at an angle to the rest of the buildings in the compound. Six of the 13 buildings are contributors to the National Historic Landmark district (280, 282, 283, 284, 285, and 288).[1] One has been significantly altered (290), two are insubstantial storage sheds (268 and 286) and four are very small in size (269, 278, 287, and 289). These structures do not contribute to the National Historic Landmark district. Concrete roads and parking areas surround the buildings, and the entire compound is enclosed by a chain link fence with wood slats through the links. Before the fence was completed in the mid-1950s, the compound was mostly open to the surrounding area. A long row of eucalyptus trees borders the compound on the east, effectively obscuring it from view from the Marina Green.

All six of the contributing buildings share a common color scheme of white exterior walls and roofs of red composition roll or shingles. Three buildings have corrugated iron siding, two have horizontal wood siding, and one is covered with asbestos shingles. The proportions of

each building are different, and each building's roof has a different pitch. Some buildings are rectangular in shape, while others are quite irregular in plan. Despite these differences, the buildings are unified in their unadorned, utilitarian appearance; their arrangement in the compound was planned for their function as an engineering and maintenance yard.

Many changes have been made to individual buildings and to the complex as a whole since several of the buildings were built during World War II. When the office of the Post Engineer took over the complex in 1950, it added machinery and partitions to the existing buildings, and built new ones as needed in order to function as a maintenance department for the Presidio. Since their rebuilding program was completed in the early 1950s, there have been few changes to the complex, save the replacement of some doors and windows and the remodeling of some building interiors.

The six contributing buildings are described below.

Building 280 - Post Engineering Headquarters Office

This administrative office building was built in 1942, and had four additions made during the early 1950s. It appears the western wing (whose roofline is higher than that of the main building) was built as two additions, in 1951 and 1953. The centrally placed entrance pavilion on the north side is a 1951 addition, and the furnace room, which rises to a tower-like second story on the south side of the building, is another early 1950s addition.[2] In plan the entire building is rectangular, measuring 40 feet × 137 feet; with one 4-foot × 18-foot projection, the centrally placed entrance pavilion on the north side. Despite this regular floor plan, the complex roofline created by the crossed gables and shed roofs on the 1942 portion of the building, the higher gable on the western addition, and the gabled second-story furnace room give the building the appearance of having been cobbled

together. Nevertheless, it is unified by the consistent use of horizontal siding on all sides.

Structurally, the building is of wood frame construction with a continuous concrete footing foundation. The roof is composition shingles on a wood deck supported by rafters; the exterior walls are horizontal wood siding; and the floor is laid on 2-foot × 6-foot joists resting on the concrete footing.[3] The original 1942 portion of the building has a gabled roof, two cross gables, and two shed roofs, and one of the shed roofs extends onto the entrance pavilion.

All of the windows in the north side of the building (except at the northeast corner) and in the west side are aluminum frame replacements. Original wood six-light windows (possibly original) meet on the two sides at the northeast corner; and a large picture window has been cut into the east side of the building, replacing a smaller window. The doors are modern replacements. Louvered vents in the gables provide ventilation to the interior of the building.

The materials and detailing of all of the additions were in the manner of the original building. Save for the difference in rooflines, the western wing is a seamless addition to the original 1942 building.

The interior is distinguished by a long central hallway with offices on both sides. The hallway opens into 10 offices on the north, and nine office rooms plus restrooms to the south. Some of the southern offices are grouped in suites. The arrangement of rooms has been changed considerably since 1970.[4] Nearly all of the interior furnishings appear to post-date the additions of the early 1950s by a considerable period. The floors are carpeted, lights are fluorescent, the walls have wood panel wainscoting in the hallway, and are plastered in the offices.

Building 282 - Plumbing Shop

This wood frame building was built ca. 1952–1953, and replaced a corrugated iron building of 1942.[5] The current building sits on a concrete slab foundation and has a roof of composition roll over a wood deck, supported by a wood truss.[6] The building is square, measuring about 60 feet × 60 feet, with gables at the north and south ends. The exterior walls are horizontal wood siding, the windows are all double hung with wood sashes, and the doors are all modern hollow core replacements. Wooden hoods cover the doorways, and several metal vent and exhaust pipes sprout from the roof. Minor alterations to the building include the addition of a doorway to the east side and a third doorway to the west side.

The interior plan has changed repeatedly over the years. The earliest floor plan, from 1963, shows a small office in the northwest comer, and, along the entire length of the back wall, a stock room and two offices. The rest of the interior space (about 80%) was devoted to shop space. An overhead tram rail and hoist extended through the front entrance from just outside the building to about 15 feet inside of it. The floor was concrete; the walls were unfinished, with exposed studs everywhere; and the truss roof support, which rested on wood posts, was open to view. In 1963, one large space heater was suspended from the truss members near the west wall.[7]

A plan drawn in 1970 shows that the floor plan had changed slightly. The office in the northwest comer had been enlarged and a small storage room had been built next to it. In the rear of the building the two offices had been combined into one, and a second large storage space had built next to the existing one. At this time the large shop space in the interior occupied about two-thirds of the floor area.[8]

Numerous changes have occurred since 1970. A kitchen was added against the west wall; the office in the rear became three offices by the

addition of partitions; partitions forming the two large storage spaces in the rear were removed; and the entire east half of the building has become four new storage rooms by the construction of new partitions. The open space in the center, which is no longer used as a shop area, has been reduced to about one-third of the total floor area.

Modern finishing materials have been applied to the new rooms and to some of the older rooms in this building. The perimeter offices and kitchen have linoleum floors (the storage spaces and center remain concrete); office walls have wood panel wainscoting, with plaster above; the kitchen has inexpensive cabinets, a gas range, a dishwasher and a fridge; and the lighting is fluorescent everywhere.

Although building 282 has changed very little on the outside, only a portion of the workshop space remains to recall the original interior appearance.

Building 283—Main Wing (1926) Warehouse

Building 283 was built in at least three phases, beginning in 1926 and ending by 1950.[9] The additions are similar in character to the original (1926) portion of the building; and except where additions have obscured the original wing, the exterior remains largely intact.

The first wing to be built is today the largest part of the building. It measures 132 feet, 6 inches (along its east-west axis) × 60 feet (north-south) and rises to a full two stories. It is the southeastern wing of the building, and is located directly across from Building 280.[10]

Since both stories of this wing were built to serve as a warehouse, post-and-beam construction methods, using heavy structural members, were used to carry the loads.[11] Posts are arranged in six rows. Those in the walls measure 6 inches × 6 inches; posts in the intermediate rows measured 6 inches × 6 inches and 8 inches × 8 inches; and those

in the two central rows are paired to measure 8 inches × 16 inches. These latter rise the full two-story height of the building. The beams measure 8 inches × 11 inches. These structural members are visible throughout the first-story warehouse interior and are also evident in part of the second story.

Since the second story was originally used as warehouse space, a corridor two stories in height occupied the center of the building. This high corridor was framed by rows of paired 8-inch × 8-inch posts and was designed for a crane which could lift material up to the second level.[12]

The foundation is a combination of a continuous concrete footing around the perimeter, concrete footings for the interior posts, and a concrete slab floor. The post-and-beam framing is supplemented by 2-inch × 8-inch studs within the walls, and the rafters and floor joists are 2 inches × 12 inches.

The roof is pitched, with gables at the east and west ends. It is covered with red composition roll laid on a corrugated iron deck over 2-inch × 16-inch rafters. The rafters are supported by the two center rows of paired 8-inch × 8-inch posts, plus diagonal members between the walls and the rafters. Rafters extend past the walls of the building and are open to view.

On the exterior of the building the walls were covered on all four sides by sheets of corrugated iron. Marina District neighbors complained about its industrial appearance soon after the building was built; nevertheless, corrugated iron continued to be used for additions to building 283 as well as other buildings in the complex.[13]

Light was admitted through a variety of multiple-light windows. The two long facades (the north and south walls) each had 11 bays of windows at the second-story level, and 10 bays of windows (plus a

doorway) in the first story. The second-story windows measured 3 feet, 2 inches square and were divided into six lights; while first story windows were over twice as large, measuring 3 feet, 4 inches × 6 feet, 4 inches, and were divided into 12 lights. Of the 42 original windows on these north and south sides, 25 remain intact. Several of these are somewhat obscured by a screened-in porch addition on the north.[14]

On the east and west sides of the oldest portion of building 283, all windows were composed of 12 lights. The four on the west side were arranged around the sliding doors, and all remain intact. On the east side there were nine such windows, also arranged symmetrically around the central sliding door; six of these remain. The composition on the east side was topped off by a metal louvered vent set in the peak of the gable.

Centrally placed sliding doors were located in all four walls of the building.[15] The sliding doorway on the south side has been replaced by a regular walk-in door, and the sliding wood doors on the east and north have been replaced by roll-up doors of modern materials, but the door on the west side remains original. The single doorway is covered by two wooden doors, each 10 feet × 11 feet, which slide to the right and left and are suspended from above. Besides the sliding doors, the only other entrance was a narrow doorway on the east side. It still exists, though the old door has been replaced with a modern one.

On the interior, 87% of the first story was originally devoted to warehouse space, and the remainder was occupied by two small offices at the east end of the building. By 1964, these offices were removed, and two larger offices were built into the southeast corner of the building.[16] Later, by 1970, a new room (for storage) was built into the northeast corner of the building. In sum, three large rooms have replaced the original offices in the east end of the building. Despite these changes, 70% of the first story is still one large warehouse space.

Post-and-beam construction is evident throughout the first-story interior. Most wall surfaces have been finished with plywood or masonite, but open framing, showing the corrugated iron exterior sheathing, is still visible in some places. Metal shelving fills the warehouse space, and the fighting is fluorescent.

The second story has been subdivided into offices. The eastern half of the second floor was converted in 1962, and the process was completed sometime between 1964 and 1970, when the central corridor for crane usage (open through two stories) was floored over.[17] Now the second-story floors are variously linoleum, carpeting, and hardwood; the walls are plasterboard; and most ceilings are plasterboard nailed to the rafters. Some rooms have lowered acoustic tile ceilings, and in one place the rafters remain visible. The restrooms have modern fixtures, and, as in the first story, the lights are fluorescent throughout.

In sum, the oldest wing of building 283 retains a high degree of integrity on its exterior facades, excepting the replacement of a third of the original windows and three of the sliding doors. On the interior, most of the first story remains a warehouse, and is little altered; while the second story has been thoroughly altered for office use. The most distinctive aspects of this building are its early age relative to the other buildings in the compound, and the use of post-and-beam construction.

Building 283—Short Extension of the Main Wing (date unknown)

At an unknown time before 1950, an addition was made to building 283 which extended the main wing west by 30 feet.[18] In its roofline, gable pitch, extended rafters, and use of corrugated iron, it matched the original building very closely. Windows are also similar, with 12-light windows on the west side and nine-light windows on the south side. Two large roll-up doors on the first story are distinctly modern in appearance, and may be original to this addition. The interior is

devoted to pipe storage on the south and three offices on the north. Inside this addition, the intact west facade of the main wing is visible.

Unlike the post-and-beam main wing, this addition is constructed of wood frame. Like that on the main wing, the roof is composition roll and corrugated iron laid over 2-inch × 16-inch rafters. These rafters are supported by two longitudinal wood trusses resting on the wood frame walls.

Building 283—Garage Addition (1945)/Auto Shop

Although its integrity is fairly poor, the construction type, materials, and detailing of this 1945 addition are visually compatible with the main wing of 1926. The addition measures 100 feet (on its north-south axis) × 45 feet (east-west), and it extends north from the west end of the main wing. (Actually, the two wings just touch comers.) Construction is post-and-beam, with posts measuring variously 5 inches × 5 inches and 8 inches × 8 inches; and beams approximately 8 inches × 10 inches. The foundation is concrete slab, with some individual concrete footings for the posts and slightly raised continuous footings around the perimeter. Second floor joists are approximately 2 inches × 12 inches. The roof is composition roll over corrugated iron.[19]

The walls are corrugated iron on all sides. All 11 windows were on the north and west sides of this wing, while the entire length of the east side was devoted to eight ground-to-eaves garage doorways. Each doorway had a pair of doors which opened outward, and these doors were made of corrugated iron with wooden cross bracing on the inside.[20] Integrity of the window and door openings is poor. The only window definitely remaining in its original location is a six-over-six-light double-hung window in the second-story level of the north side. The other windows are six- and nine-light windows which may have been moved from other locations in the building. On the east

side, only three of the original corrugated iron doors remain in place. Five new doorways have been cut into the building, and some wood siding has replaced corrugated iron on the east side.

By 1964[21], the original garage space interior had been divided into several storage areas through the use of a variety of "at hand' materials: wood planks, plaster board, and chain link fencing. The changes also included two offices and an open kitchen area in the southern end of this addition. The presence of an old six-light window in the office further suggests that these windows were sometimes cannibalized from their original locations elsewhere in the compound.

There is a second-story level to this wing which was used for storage, but access to it was not possible for this report.

Building 283—West Wing (ca. 1947-1950)

This westernmost wing of building 283 was built at an unknown date between 1947 and 1950.[22] The construction type is a mix of stud frame and post-and-beam, resting on a foundation of concrete slab and continuous concrete footings. The roof type is also varied. The eastern portion is a flat roof composed of a wood deck on horizontal rafters, and the western portion is gabled, and composed of corrugated iron. Both parts are covered with red composition roll. The walls are corrugated iron on the south and west sides, and a mix of corrugated iron and horizontal wood siding on the north. Windows are mostly intact as built, with several changes. These include large eight-light windows on the west side of the machine shop (five out of the original six survive); and numerous smaller windows in the other facades. Two original drive-through doorways, with large wood doors that open outward, survive in the north side of the auto repair shop; but two other drive-through entrances have been altered in this wing, and one has been added. Finally, a shed-like restroom (which may be an even later addition) is attached to the north wall of the sheet metal shop.

Aside from the alterations to the drive-through entrances and the addition of the rest room, this wing is generally intact as built and is architecturally compatible with the older structures in this compound.

Building 284 - Electrical Shop

Like the older portions of building 283, described above, building 284 is a post-and-beam structure clad in corrugated iron. It is two stories in height, and its measurements are 61 feet (along its north-south axis) × 45 feet (east-west), with small extensions to the east and west for a restroom and office. The building uses 5-inch × 7-inch posts and 7-inch × 8-inch beams, and the foundation is concrete slab, with 14-inch tall concrete footings upon which the posts rest. The gabled roof is made of composition shingles laid over a deck of corrugated iron, supported by rafters. The walls are corrugated iron on all four sides, and the office and restroom extensions on the west and east sides are similarly covered.

Door and window openings generally remain as built, but most of the doors and windows themselves have been replaced. A row of five four-light windows on the west side of the building remains intact, but the other windows on the main body of the building are aluminum frame replacements or are boarded over. Original nine-light windows survive in the office and restroom extensions. A sliding door has replaced the large swinging doors in the center of the north side. None of the other original exterior doors has survived, except that to the restroom.

When the Post Engineer took over this complex of buildings in 1950, the interior of building 284 was one large open space. The staff of the Post Engineer then erected partitions to divide the building into refrigeration and electrical shops.[23] The earliest surviving floor plan drawing for this building dates to 1964, and shows how the space was divided. About half of the first floor, along the west side, was devoted

to the kitchen and refrigeration department; a room in the southeast comer was the electrical department; two small rooms in the center and center-rear were for parts storage; and an office and locker room occupied rooms along the east wall.[24]

The second story, reached via a wood stairway just inside the main entrance, fits under the peak of the gable, and thus is narrow. It was devoted to storage and a locker room, and cabinets lined both the east and the west walls to the rear of the building. There was a hatchway through the floor near the front of the building, and a hoist for bringing items up for storage. A tram rail ran the length of the second story from this hoist to the locker room in the rear.[25]

Today, the first-story shop space remains intact, with a concrete floor and plaster walls and ceilings. Along the east side of the building, the office in the northeast comer has been converted into a kitchen, while the locker room and electrical department have become offices. These rooms have linoleum floors, plaster walls, and acoustic tile ceilings. A tool room occupies the center rear of the first story.

The wood stairway to the second floor survives unchanged, and upstairs wood cabinets still line the walls from front to rear. The floor is linoleum, and plasterboard is nailed to the ceiling rafters.

Building 285 - Paint and Sign Shop

This paint and sign shop is a rectangular building measuring 84 feet, 6 inches wide (east to west) × 69 feet deep. Because of its extreme width, the roof of the building is formed, not by one gable, but by three. Two of these gables are symmetrical, with ridgelines running north to south, but the third gable, which fills the gap between them, has unequal sides, and looks very much as though it was built at a later date as an addition.

The wall framing type cannot be determined from plans or by a site visit, but in the interior of the building, 5-inch × 5-inch posts support built-up beams made of three 2- × 6-inch boards, and these beams in turn support the roof of composition roll over corrugated iron. The foundation is concrete slab with continuous concrete footings. The walls are corrugated iron, and thus the appearance of this building is similar to that of buildings 283 and 284.

Windows came in a variety of widths; were arranged singly, in pairs, and in threes, and were divided variously into four, six, and nine fights. just over half of these remain intact. Access to the shop space was through a wide, drive-through doorway, with two doors that swung outward, located on the north side. This has since been replaced by a roll-up wood panel door. Several doorways for pedestrians in the north, south, and east walls have all been altered or removed.[26]

When the Post Engineer took over this complex in 1950, the interior of building 285 was one large open space. The staff then erected partitions to divide the building into paint and sign making shops.[27] The earliest available plan, drawn in 1964, shows that nearly half the interior was taken up by the paint shop. Other large rooms included the sign painting room in the northwest comer and a storage room in the southwest comer. Several small rooms (an office, two locker rooms, a wash room, and paint storage) were grouped in the southeast comer of the building.[28] During the next six years, partitions were added to carve out two additional storage rooms, and the office was converted to a glass shop.[29] After 1970, the glass shop became more important and was moved to a larger room in the north side of the building, where an office, a storage room, and part of the paint shop had been.[30] At present, the paint shop, glass shop, and sign painting shop occupy about two-thirds of the building, while offices occupy the balance of the building along the south wall. Throughout the interior, the finish consists of concrete floor, plaster board walls, and lowered ceilings made of plasterboard.

Building 288 - Carpenter Shop

The carpenter shop consists of a main building measuring 100 feet (from east to west) × 40 feet, plus four shed-like additions on the north side. Structurally, the building is wood frame, and the foundation is a simple concrete slab. The roof is composition roll laid on a wood deck, which is supported by a wood truss. The truss roof support spans the 40 foot width of the building and is completely supported by the north and south outer walls, without the aid of any interior posts or partitions.

When the Post Engineer took over this complex in 1950, the walls of building 288 were covered on the exterior by horizontal wood siding. At an unknown date a contractor was hired to cover these walls, and those of the shed additions on the north, with cement asbestos shingles nailed over the wood siding.[31] The windows in the main building were all divided into six lights, with a row of seven on the south side, three on the east side, and seven (arranged in groups of two and three) on the west side.[32] All but one of them are intact today. By contrast, windows in the four sheds are casement and double-hung.
Entry to the main building was via wide doorways on the south and east sides. From the earliest available plans (1964, 1970), it appears the original doors were double doors which swung outward.[33] These have been replaced with wood sliding doors hung on a rail. Another doorway leads into the easternmost of the sheds on the north side of the building.

Just outside the building, adjacent to the south wall, is a funnel-shaped, sheet metal sawdust collector which is mounted in a timber frame and raised to the height of the roof. Aside from the buildings themselves, it is the most conspicuous structure in the Post Engineer's compound.

The interior of the main building has always been one large room, unbroken by partitions or posts. The walls are left unfinished on the

inside, leaving the wood frame visible. The wood truss roof support is likewise left open to view. Insulation was applied to the underside of the roof after 1950. The floor surface is the concrete slab foundation. A tram rail has been hung from the roof truss, as has modern fluorescent lighting. The shop space is filled with table saws, shop tables, and drill punches, and an exhaust fan is mounted on the east wall near a small vent opening.

To the north are three shed-like additions built in the early 1950s, and a fourth built in 1970. From west to east, these were used as: a locker room and storage space for saws; a plaster and masonry shop (1970); a furnace room; and an office and storage.[34] The plaster and masonry shop later became a lounge, and on one wall is the compound's "retirement board," where workers have signed their names and hung their caps upon retiring.

Historical Context: The 4.4-acre site which constitutes the Post Engineer's shops and yards remained undeveloped during the 70 years that Spain and Mexico occupied the Presidio, and for over half a century after the United States took possession. Although the U.S. Coast Survey map shows that the site was solid ground, it remained isolated from the rest of the Presidio by a marshy slough which cut across the northeast corner of the military reservation. Prior to development, this isolated area consisted of a sandy beach backed by sand dunes, and was known variously as "Strawberry Island" and "Sand Point." During the 1850s, a trail wound its way through the sand dunes and vegetation on the site, and by 1870 Strawberry Island was bisected by a road running from the northwest corner of the Marina District to Fort Point. For many years the only structure on this sandy promontory was the Presidio Wharf, which jutted out into the water at a point about 1,000 feet west of the current Post Engineer's compound.[35]

When the slough was filled in at about the turn of the century, Strawberry Island became more valuable to the military. Four

warehouses were built for the Quartermaster Department just west of the current Post Engineering compound, and two oil tanks were erected about where building 268 now stands.[36] These were swept away, and the entire site was completely transformed, when the Panama Pacific International Exhibition (PPIE) came to San Francisco in 1915.

Although the best known buildings of the PPIE were located in what is now known as the Marina District, its boundaries overflowed into the Presidio. Exhibit halls for foreign countries were located west and south of the Palace of Fine Arts, and state buildings were built where the Post Engineer's compound and Crissy Field later were. Four of the state buildings—those of Oregon, New York, Pennsylvania, and New Jersey—occupied the current site of the Post Engineer.[37]

At the end of the exhibition, all of the state buildings were razed except for the Oregon Building. Exactly how this building was used by the Army is unknown, but the Construction Quartermaster considered storing equipment and materials in it, and it was recommended for use as a Transbay Ferry Depot and Boat House. In September 1918, Corporal Robert B. Cary of Company D, 38th Battalion, U.S. Guards, was detailed as a Moving Picture Operator at the Oregon Building, and so it may have found use as a post movie theater as well. In June of that year, companies had their group photos taken in front of the building's columns, which were made of logs 4 feet thick and 35 feet tall. The building continued to stand at least into 1919, and was demolished by October 1925.[38]

During World War I, over 200 barracks and storehouse buildings were built in the area known as the "North Cantonment," which occupied a 4,000-foot stretch of the Presidio shoreline formerly occupied by PPEE buildings. The site wrapped around the still-standing Oregon Building, and about a dozen of the North Cantonment barracks and storehouses were located within the boundaries of the future Post Engineer's shops and yards. They were intended to be temporary buildings, and did not

long outlast the war for which they were built. Nearly all of the cantonment was demolished during 1925-1926, but the last dozen buildings, those within the future Post Engineer's site, were still being used in late 1926, and several of them lasted into 1927.[39]

The North Cantonment history slightly overlaps that of the Post Engineer's shops and yards. In 1926 the first building in the present-day Post Engineering compound was built. This was building 283, a two-story corrugated iron structure built as an engineering warehouse. It was located immediately north of the last surviving North Cantonment buildings, about where the Oregon Building had recently stood. For a brief period (1926–1927, at least) building 283 and the last of the North Cantonment buildings existed side-by-side.[40]

At that time, there was no fence or row of eucalyptus trees along the east boundary of the Presidio, and the corrugated iron warehouse building and the last of the North Cantonment barracks were in full view of the residential area of the Marina District.

Late in 1926, members of the Marina District Improvement Association complained to the Commanding General of the 9th Corps Area and to U.S. Representative Florence Prag Kahn about the unsightly appearance of these buildings, and asked that they be removed. The Army's response was that, although the barracks would soon be demolished, the warehouse was less than two years old, was neat and well painted, and was 'absolutely essential' to the Army. If the neighbors wished, however, they could plant a row of ornamental trees alongside the building to obscure it from view. This minor controversy may have resulted in the row of eucalyptus trees that now borders the Presidio reservation where it meets the Marina Green.[41]

Exactly which department or "engineer" in the Presidio was in charge of building 283 initially is unclear. During the 1930s at least three different entities had their own construction shops in the Presidio. The

Quartermaster department was responsible for most new construction on the post, but Fort Winfield Scott and Letterman Hospital also had their own shops. All this changed during World War II. In December 1941, when the United States entered the war, within the Army responsibility for most construction was transferred from the Quartermaster to the District Engineer of the Army Corps of Engineer's. At the Presidio, in about 1942 or 1943, the Post Engineer and Letterman Hospital merged their shops, and within about a year, Fort Scott's shop also merged with that of the Post Engineer.[42]

During the war the Post Engineer's office, under Captain Wesley Covert, was extremely busy at Letterman Hospital, not only in making general repairs to buildings at the main hospital area, but in remodelling new mobilization buildings at Crissy Annex for hospital use. Covert employed a crew of 80 civilians and over 100 Works Progress Administration workers, including carpenters, sheet metal workers, blacksmiths, plumbers, electricians, and painters. Their work at Letterman Hospital was vital to the Presidio's function as a Post of Embarkation, and later in the war, as a Post of Debarkation for returning wounded and sick soldiers. Covert's crew was on call 24 hours a day for repairs to the hospital's electrical and plumbing systems, which could affect vital hospital services.[43]

Letterman Hospital's newsletter, *The Fog Horn,* described the Post Engineer's warehouse during the war, and its importance to the hospital:

> Because so many extraordinary kinds of fittings are used in hospital alteration and maintenance, a large warehouse with thousands of boxes and bins is kept stocked with every conceivable item of hardware and construction supplies, so that no delay will be caused by lack of materials.[44]

Whether this warehouse was building 283 remains uncertain.

Between 1942 and 1944 the San Francisco District of the U.S. Army Corps of Engineers built several new shop buildings and an office building in the northeast corner of the Presidio, where the warehouse, building 283, already stood. The compound of buildings then became known as the District Engineer's shops and yards. How these buildings were used during the war, and how the U.S. Army Corps of Engineers shared responsibility for construction work in the Presidio with the Post Engineer, is unknown. It appears that the District Engineer was in charge of larger construction projects requiring engineers, and their district included the coastal area of northern and central California, as well as much of Oregon and Nevada. Their projects included construction of rail yards, airfields, fortifications, arsenals, Japanese internment camps, port facilities, and training camps, including the Oakland Army Base and Fort Ord. In all probability the rail yard of the Hospital Train Unit at Crissy Field was built by the staff of the District Engineer's shops and yards. By contrast, the Post Engineer in the Presidio of San Francisco was responsible for the construction of smaller buildings and repair jobs.[45]

By 1950 the District Engineer and his staff had abandoned their shops and yards and removed all of the equipment from the buildings. When the Post Engineer took over the complex in that year, the department found the buildings completely empty, and therefore the uses to which most of the buildings had been put is uncertain.[46]

During the post-war years, 1945–1950, the Post Engineering department had been located in several scattered buildings. Their carpenter shop, paint shop, and sign making shop were all in building 933, at Crissy Field. The welding, sheet metal and plumbing shops were all in building 643, also at Crissy Field. The electrical shop was in building 107, Main Post, and packing and crating were in one of the Presidio's brick stables. When the Post Engineer moved to its new complex in buildings 280–288, in the northeast corner of the Presidio, it could finally consolidate all of its shops in one location.[47]

The Post Engineer, under Lieutenant Colonel Low, made many changes when it took over the complex in 1950. One building, building 282, was insubstantial and in very poor condition. This was torn down, and a new building on the site was built from scratch. Other buildings had partitions and equipment installed. From their previous carpenter shop in Crissy Field, the Post Engineer staff took table saws and other equipment and bolted them to the floor of building 288. The sawdust hopper and collector was also moved from Crissy Field to building 288. Shed additions were made to the north side of building 288, and several additions, including a west wing, were added to building 280. The two large storage sheds, buildings 268 and 286, and seven small sheds for the storage of gasoline, oil, and paint, buildings 292-298, were all built in 1950-1951. A concrete block transformer room was built in 1952. Finally, the entire compound was paved, previously the grounds were hard packed sand.[48]

During the 1950s and 1960s nearly all of the staff of the Post Engineer was made up of World War II veterans.[49] From the Post Engineer's shops and yards the staff performed repair work of many kinds throughout the Presidio. Some of their work was for ceremonial purposes, as when they worked for 72 hours straight preparing the U.S. Coast Guard buildings near Crissy Field for President Nixon's arrival in 1972, or when they performed construction work in downtown San Francisco's Palace Hotel for the Chinese ambassador's visit. Other jobs have primarily served San Francisco's civilian visitors to the Post; e.g. laying railroad ties and putting up the anchor chain at the Fort Point sea wall.[50]

Over the past two decades the designation of the Post Engineer department changed a few times. During the mid-1970s it became the Directorate of Facilities and Engineering (DFAE, which was always pronounced "Daffy"), and in the early 1980s it became the Directorate of Engineering and Housing (DEH). More recently, and up to the time the Presidio of San Francisco was turned over to the National Park

Service, the department was called the Directorate of Public Works (DPW).[51]

The buildings in the Post Engineer's shops and yards that contribute to the National Historic Landmark District, their dates of construction, and their various uses over the years, are listed and discussed below.

Building 280 - Post Engineer's Headquarters Office (1942)

This building was used as administrative offices from the date of construction until 1994.[52]

Building 282 - Plumbing Shop (ca. 1952-1953)

The first building on this site was a corrugated iron building with a sand floor that was falling apart when the Post Engineer took over the complex in 1950. They demolished that building and replaced it with the current one about 1952-1953. This building was the plumbing shop at least into 1963.[53] It became the maintenance shop (devoted to preventive maintenance) when that department moved here from building 285 between 1963 and 1970. Plumbing storage then moved to a wing of building 283. It appears that some plumbing activities either persisted at this location or returned to this building between 1979 and 1985.[54]

Building 283 - Warehouse Main Wing (1926)

The main wing was built as a two-story warehouse, and most of the first story still serves that function. In 1964, two master planning rooms were built at the east end of the first story, and one of these also served as a drafting room. Conversion of the second floor into offices began in 1962, was half complete by 1964, and was fully complete by 1970.[55]

Building 283 - Garage Addition (1945)

Some time after its construction as a garage in 1945, the use of this wing was changed to storage of hazardous pesticides, which had previously been stored in building 287. When a new entomology building was built in 1971, this wing became a heating shop. At present it is used for storing plumbing supplies and signs.[56]

Building 283 - Auto Shop Addition (1947-1950)

In 1970, this wing had three uses: as an auto repair shop, a repair shop (unspecified), and a sheet metal shop. More recently the repair shop was in use as a welding shop.[57]

Building 284 - Electrical Shop (1942)

The initial use of this building is unknown. When the Post Engineer took over this complex in 1950, it erected partitions to divide the building into an electrical shop and a kitchen and refrigeration shop. These uses persisted at least through 1964. In recent years the second-story supply and locker room was used as a lounge for workers in the compound.[58]

Building 285 - Paint Shop (1942 or 1944)

The initial use of this building is unknown. When the Post Engineer took over the complex in 1950, the building was one large, undivided space. The Post Engineer's staff erected partitions dividing the building into a paint shop, a sign-making shop, an office, and storage. Since ca. 1950 the paint shop has occupied the largest shop space in this building, and the sign-making shop has occupied a large room in the northwest corner of the building. Two other important uses have been associated with this building. Between 1964 and 1970 a glass shop was established in one of the small rooms long the south wall,

and after 1970 it moved to a larger room along the north wall. A preventive maintenance department was also located in this building after 1970; when it grew larger, the department was moved to building 282.[59]

Building 288 - Carpenter Shop (1943)

The initial use of this building is unknown. Ca. 1950, after the Post Engineer took over the building, this building became the carpentry shop. Table saws and other equipment were removed from building 933 and installed here, and the sawdust collector was likewise moved here from the old shop building. In the 1960s a shed addition on the north side was built for a plaster, or masonry shop. More recently, the masonry shop became a lounge area.[60]

Buildings judged to be noncontributing to the National Historic Landmark district include:[61]

Building 268 (originally numbered 297) - Heavy Equipment Shed (1951)

Building 269 - Entomology Building (1971)

Building 278 - Pesticide Storage (1961)

Building 286 - Lumber Storage Shed (1950)

Building 287 - Insect and Rodent Control/Locker Room (1946)

Building 289 - Transformer Room (1952)

Building 290 - Q&M Division Shop (1943; altered)

Buildings 292-298 - Gasoline, Oil, and Paint Storage (Pre-fabricated sheds moved onto concrete slabs in 1951, only the foundations survive)

Endnotes:

1. Paul Alley and Leo R. Barker, et al., "Presidio of San Francisco, National Register of Historic Places Registration Forms" (National Park Service: San Francisco, 1993), Section 7, 149, 169-171.
2. Quartermaster Building Books, at the Presidio Army Museum, Presidio of San Francisco. Chet Lyon: phone interview by William Kostura, April 27, 1995.
3. Building Records: ADPWEMR-5, Box 5, at the Army Records Center, Presidio of San Francisco. Quartermaster Building Books. Inspection of the building.
4. Building Records: ADPWEMR-3, Box 1.
5. Quartermaster Building Books. Chet Lyon.
6. Building Records: ADPWEMR-5, Box 5.
7. Quartermaster Building Books.
8. Building Records: ADPWEMR-3, Box 1.
9. Stephen A. Haller, *The Last Word in Airfields* (National Park Service: San Francisco: 1994), photos on pp. 39, 52, 64 indicate the warehouse was built in 1926. Erwin N. Thompson, *Defender at the Golden Gate: The Presidio of San Francisco, A History 1846-1994*, Draft Historic Resources Study (National Park Service: San Francisco, 1994), 336. Chet Lyon.
10. Quartermaster Building Books.
11. Quartermaster Building Books. Inspection of building.
12. Ibid.
13. Thompson, Defender, 336.
14. Quartermaster Building Books.

15 Ibid.

16. Quartermaster Building Books. Building Records: ADPWEMR-3, Box

17. Ibid.

18. Chet Lyon. Quartermaster Building Books.

19. Quartermaster Building Books.

20. Ibid.

21. Ibid.

22. Quartermaster Building Books. Chet Lyon.

23. Chet Lyon.

24. Quartermaster Building Books.

25. Ibid.

26. Ibid.

27. Chet Lyon.

28. Quartermaster Building Books.

29. Building Records: ADPWEMR-3, Box 1.

30. Richard Hansen and Bill Lyon: interview by William Kostura at the Presidio of San Francisco, March 29, 1995.

31. Chet Lyon.

32. Quartermaster Building Books.

33. Quartermaster Building Books. Building Records: ADPWEMR-3, Box

34. Chet Lyon. Building Records: ADPWEMR-3, Box 1.

35. Haller, *Last* Word *in Airfields,* 4-5. United States Coast Survey, Map of San Francisco, 1857 (published 1859). Thompson, *Defender,* Map of Presidio of San Francisco, 1870.

36. Thompson, *Defender,* Map of Presidio of San Francisco, ca. 1896. Major William W. Harts, "Map of the Presidio of San Francisco, California" (Corps of Engineers, Pacific Division: 1907).

37. "Panama Pacific International Exposition" (Sanborn Map Company: San Francisco, 1914).

38. National Archives, Record Group 77, OCE, Entry 393, Box 197. National Archives, Record Group 393: Presidio, Special Orders, 1918, vol. 3, Memorandum, Reserve Officers Training Camp, 1918. Haller, *Last* Word *in* Airfields, 39 (photo).

39. Haller, *Last Word in Airfields,* 12-13, 39, 52. National Archives, Record Group 92.

40. Haller, *Last Word in Airfields,* 39, 52, 64 (photos).

41. National Archives, Record Group 92, OQMG, General Correspondence Geographical File, 1922-193?.

42. Chet Lyon.

43. The Fog Horn, April 4, 1942, 2-3; September 5, 1942, 5; at the Presidio Army Museum, Presidio of San Francisco.

44. Ibid., April 4, 1942, 2.

45. Joseph Jeremiah Hagwood, Jr., *Engineers at the* Golden *Gate* (U. S. Army Corps of Engineers: San Francisco, n. d. [ca. 1980]), 243. *Annual Report Letterman* Army *Hospital,* 1945, 19, at the Presidio Army Museum.

46. Chet Lyon.

47. Ibid.

48. Ibid.

49. There were also a few non-veterans, but these had lesser status, and under Civil Service rules, were always laid off first. One of the veterans was Chet Lyon, who had worked under his uncle, foreman William Lyon, at the Letterman Hospital carpenter shop in 1942 before going to war. After being discharged he returned to the Presidio of San Francisco on November 9, 1945 and began working at the Post Engineer's carpenter shop in building 933. He moved with the rest of the staff of the Post Engineer to buildings 280-288 in 1950, and there rose to the position of general foreman. He retired in 1977.

50. Ibid.

51. Richard Hansen and Bill Lyon.

52. Quartermaster Building Books. Chet Lyon.

53. Ibid.

54. Richard Hansen and Bill Lyon. Building Records: ADPWEMR-3, Box 1.

55. Quartermaster Building Books. Building Records: ADPWEMR-3, Box

56. Quartermaster Building Books. Richard Hansen and Bill Lyon.

57. Building Records: ADPWEMR-3, Box 1.

58. Quartermaster Building Books. Chet Lyon. Richard Hansen and Bill Lyon.

59. Quartermaster Building Books. Chet Lyon. Richard Hansen and Bill Lyon. Building Records: ADPWEMR-3, Box 1.

60. Quartermaster Building Books. Chet Lyon. Building Records: ADPWEMR-3, Box 1.

61. Quartermaster Building Books. Chet Lyon. Alley and Barker, "Presidio of San Francisco, National Register," Section 7, p. 206.

Sources:

Alley, Paul, and Leo R. Barker, et al., "Presidio of San Francisco, National Register of Historic Places Registration Forms" (National Park Service: San Francisco, 1993).

Annual Report Letterman General Hospital, at Presidio Army Museum, Presidio of San Francisco.

Building Records: ADPWEMR-3, Box 1, and ADPWEMR-5, Box 5, at Army Records Center, Presidio of San Francisco.

The Fog Horn, at Presidio Army Museum, Presidio of San Francisco.

Hagwood, Jr., Joseph Jeremiah, *Engineers at the Golden Gate* (U. S. Army Corps of Engineers: San Francisco, n. d. [ca. 1980]).

Haller, Stephen A., *The Last Word in Airfields* (National Park Service: San Francisco, 1994).

Hansen, Richard, and Bill Lyon: interview by William Kostura, March 29, 1995, at the Presidio of San Francisco.

Harts, Major William W., "Map of the Presidio of San Francisco, California" (Corps of Engineers, Pacific Division: 1907).

Lyon, Chet: phone interview by William Kostura, April 27, 1995.

National Archives, Record Group 77, OCE, Entry 393, Box 197, from the notes of Erwin N. Thompson, at National Park Service, Building 102, Presidio of San Francisco.

National Archives, Record Group 92, OQMG, General Correspondence Geographical File, 1922-193?, from the notes of Erwin N. Thompson, at National Park Service, Building 102, Presidio of San Francisco.

National Archives, Record Group 393, Presidio, Special Orders, 1918, vol. 3, Memorandum, Reserve Officers Training Camps, 1918, from the notes of Erwin N. Thompson, at National Park service, Building 102, Presidio of San Francisco.

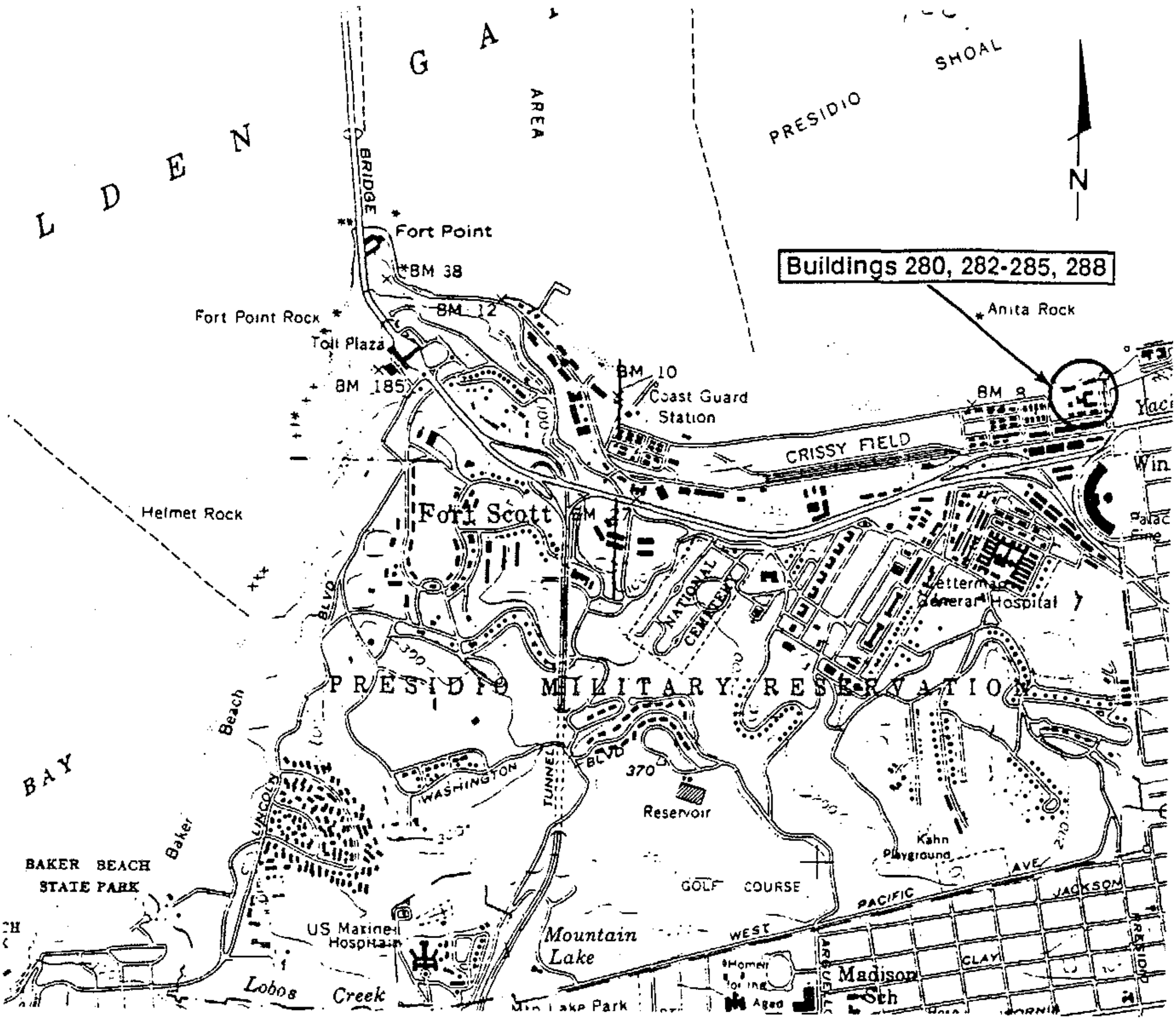
"Panama Pacific International Exposition" (Sanborn Map Company: San Francisco, 1914).

Quartermaster Building Books, at the Presidio Army Museum, Presidio of San Francisco.

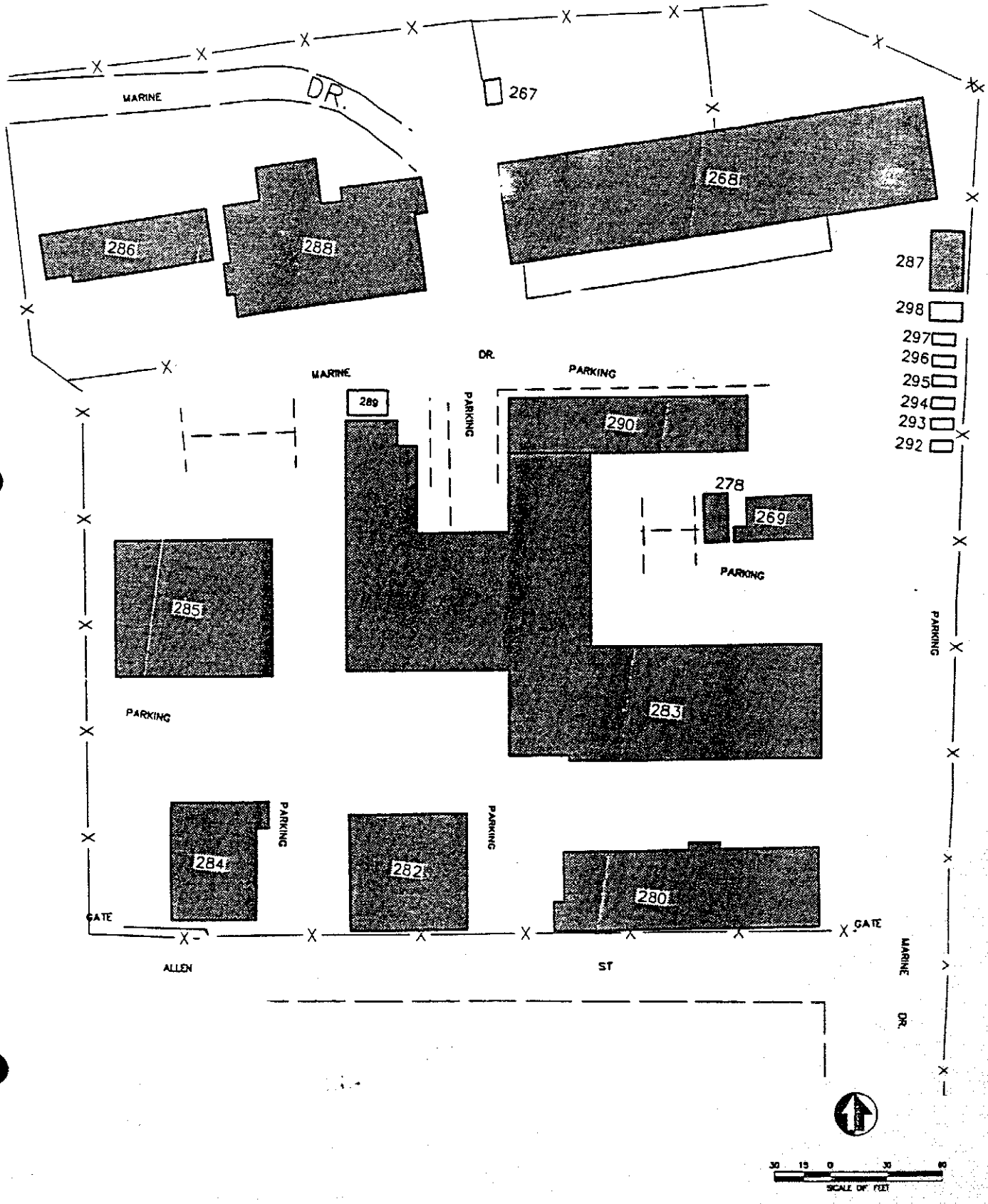
Thompson, Erwin N., *Defender at the Golden Gate: The Presidio of San Francisco, a History 1846-1994,* Draft Historic Resources Study (National Park Service: San Francisco, 1994).

United States Coast Survey, "Map of San Francisco." 1857 (published 1859).

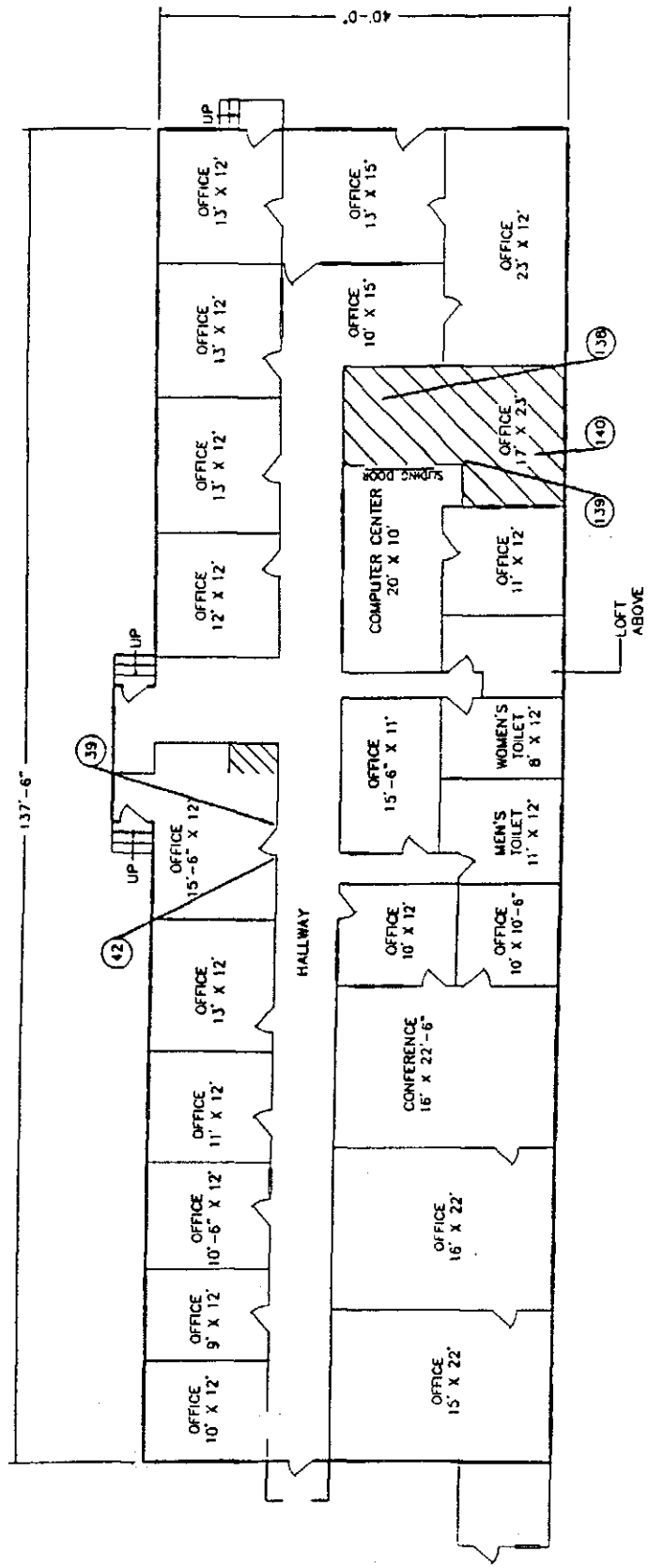
Project Information: Buildings 280, 282, 283, 284, 285, and 288 are part of the Crissy Field Planning Area, as identified in the *Final General Management Plan Amendment* (FGMPA) (July 1994). The demolition of these buildings is in accordance with the preferred alternative identified for the Crissy Field Planning Area in the *FGMPA Environmental Impact Statement* (July 1994). The Programmatic Agreement for the FGMPA Environmental Impact Statement stipulates Historic American Building Survey (HABS) documentation as a mitigation measure for the adverse effects resulting from the demolition of buildings 280, 282, 283, 284, 295, and 288. This report is part of the HABS documentation and was prepared by William Kostura, architectural historian, Dames & Moore, San Francisco, in May 1995.

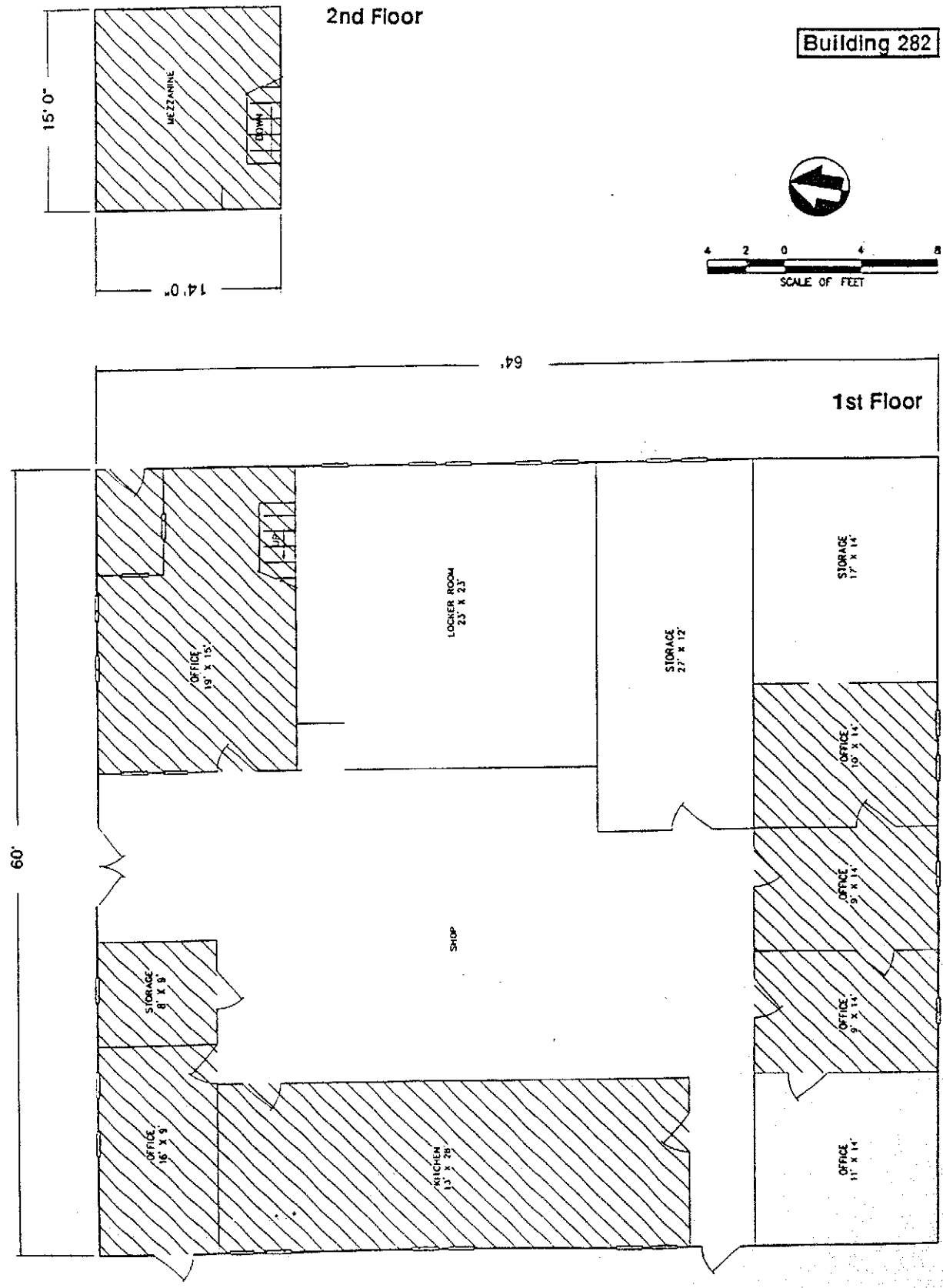

Buildings 280, 282-285, 288
N
GOLDEN GATE
PRESIDIO SHOAL
Fort Point
Fort Point Rock
Toll Plaza
Coast Guard Station
Anita Rock
CRISSY FIELD
Helmet Rock
Fort Scott
NATIONAL CEMETERY
Letterman General Hospital
PRESIDIO MILITARY RESERVATION
BAY
Baker Beach
BAKER BEACH STATE PARK
WASHINGTON
TUNNEL
Reservoir
Kahn Playground
GOLF COURSE
US Marine Hospital
Mountain Lake
Lobos Creek
PACIFIC
JACKSON
CLAY
Madison
WEST

PRESIDIO OF SAN FRANCISCO, DISTRICT ENGINEER'S SHOPS & YARD
(Post Engineer's Shops & Yard)
(Buildings 280, 282-285, 288)
HABS No. CA-2273 (Page 32)



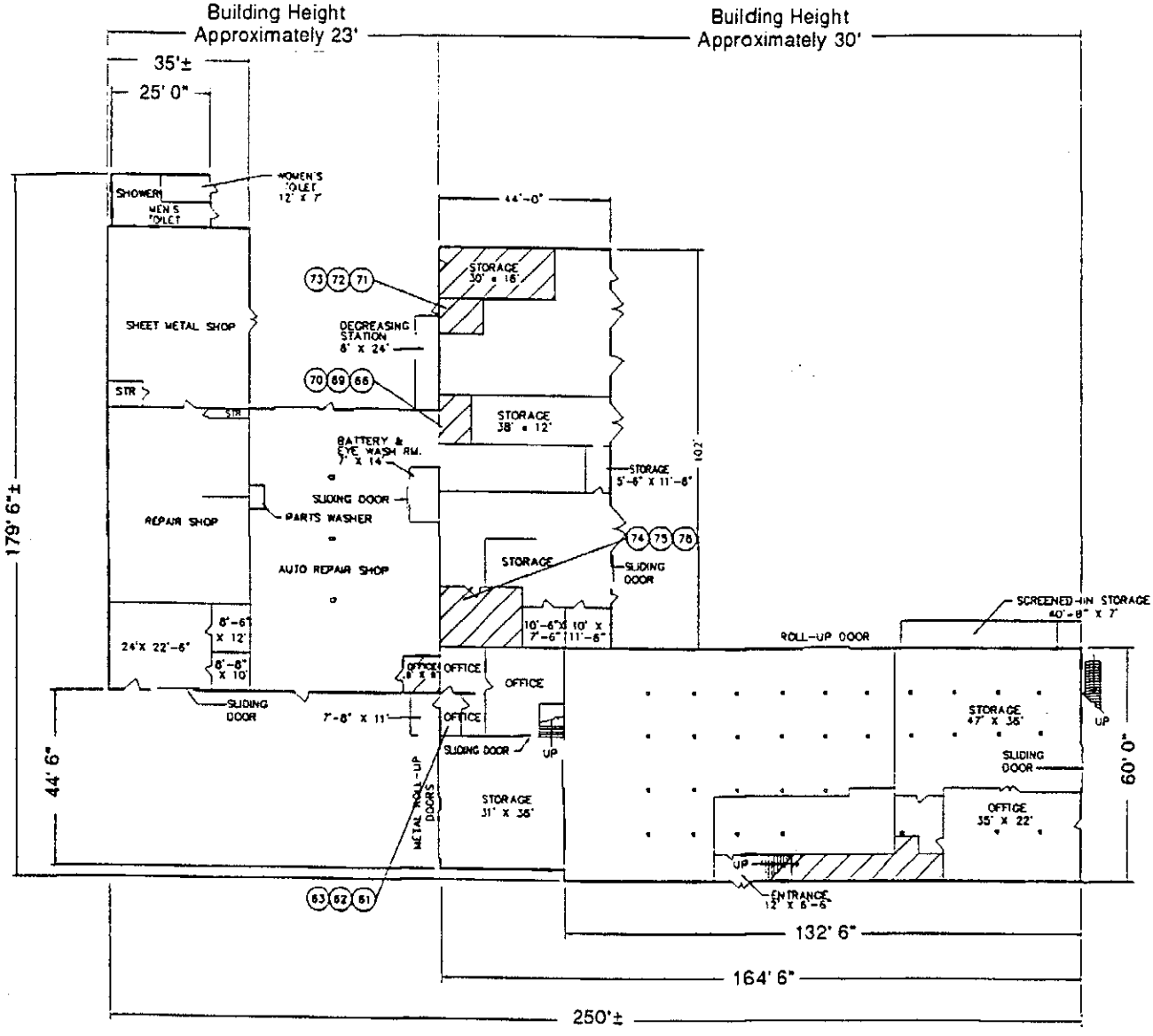
Building 280

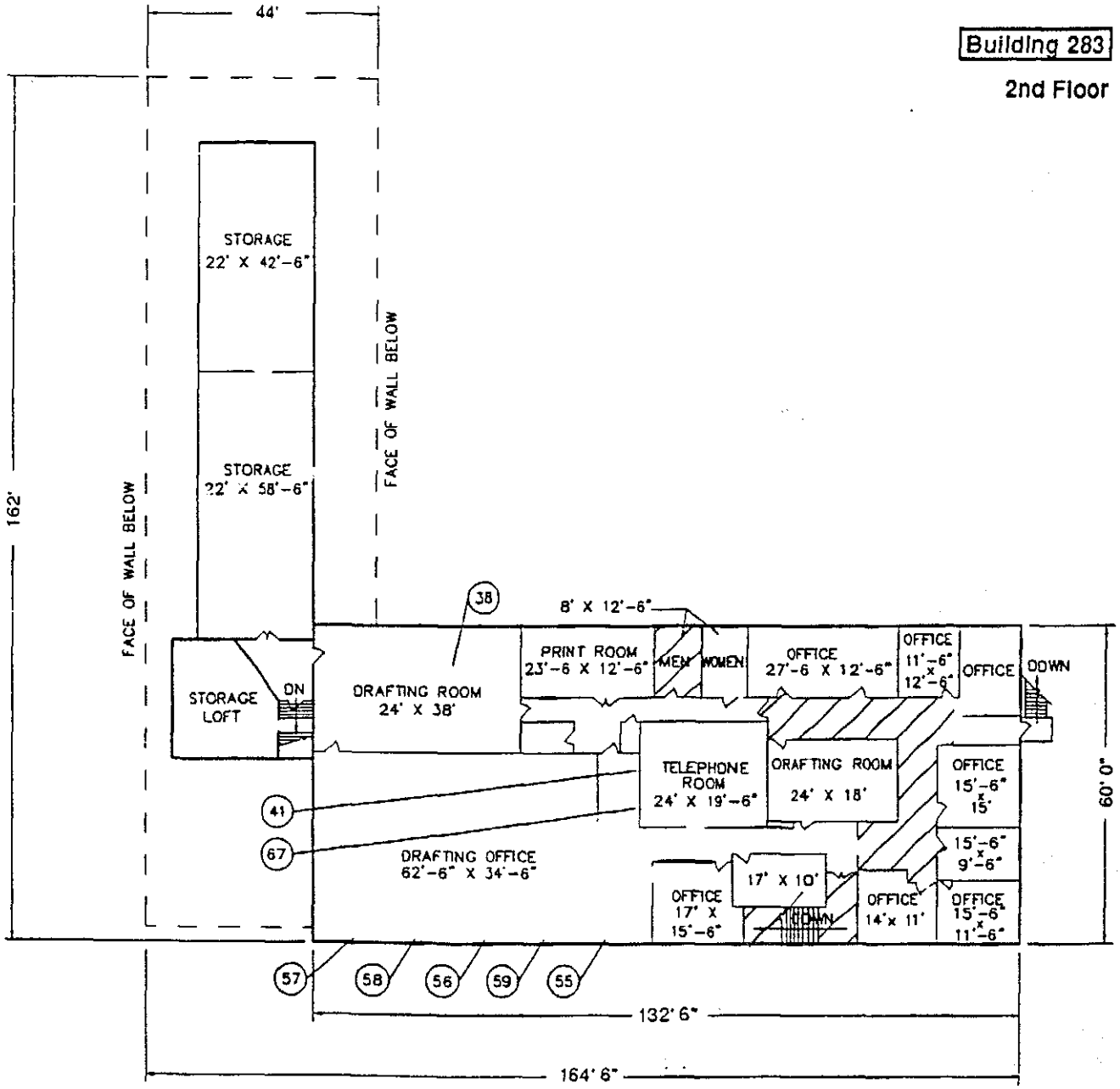



2nd Floor
Building 282
15' 0"
MEZZANINE
DOWN
14' 0"
4 2 0 4 8
SCALE OF FEET
64'
1st Floor
60'
OFFICE 19' X 15'
LOCKER ROOM 23' X 23'
STORAGE 27' X 12'
STORAGE 17' X 14'
OFFICE 10' X 14'
OFFICE 9' X 14'
OFFICE 9' X 14'
OFFICE 11' X 14'
SHOP
STORAGE 8' X 9'
OFFICE 16' X 9'
KITCHEN 13' X 28'

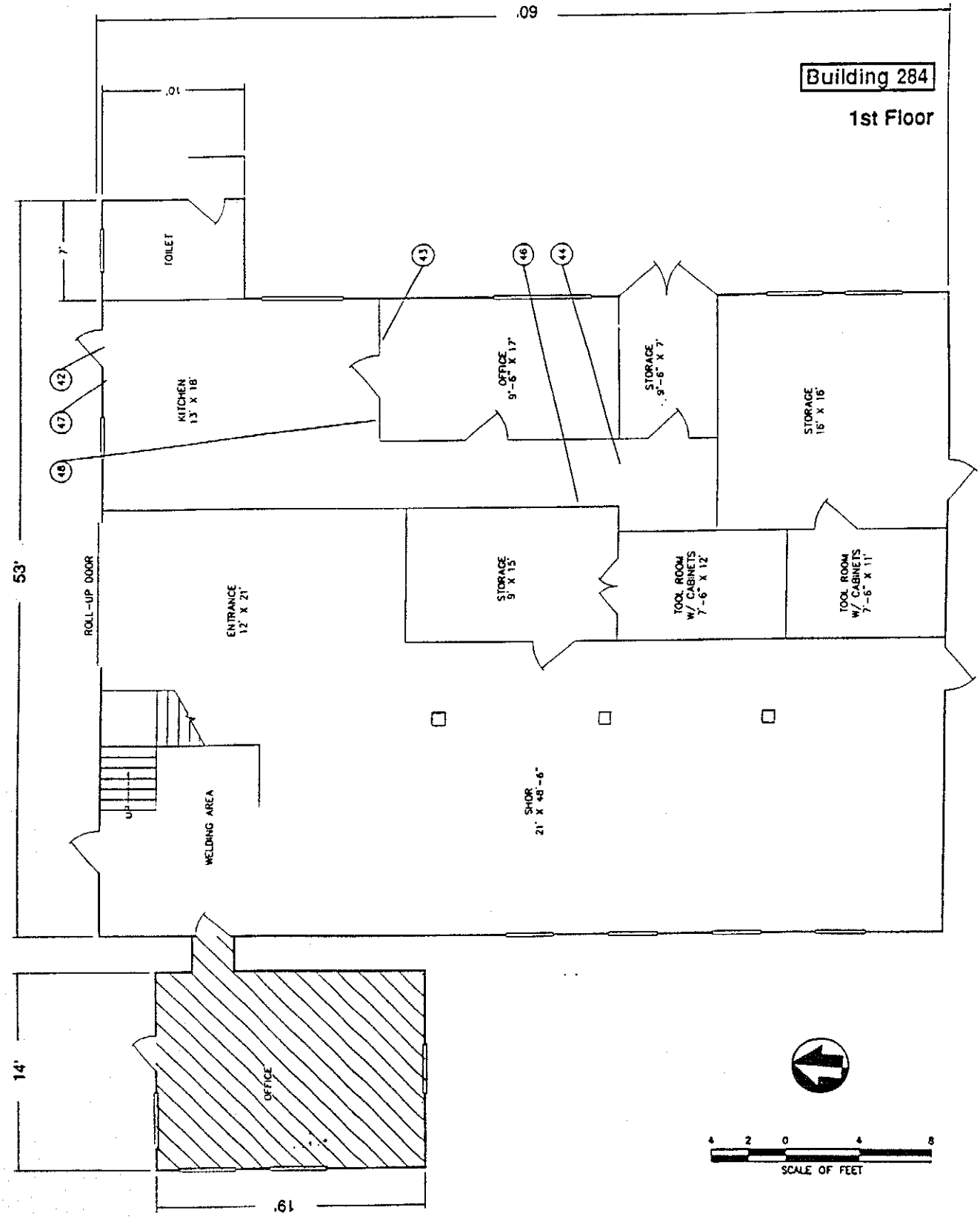
Building 283

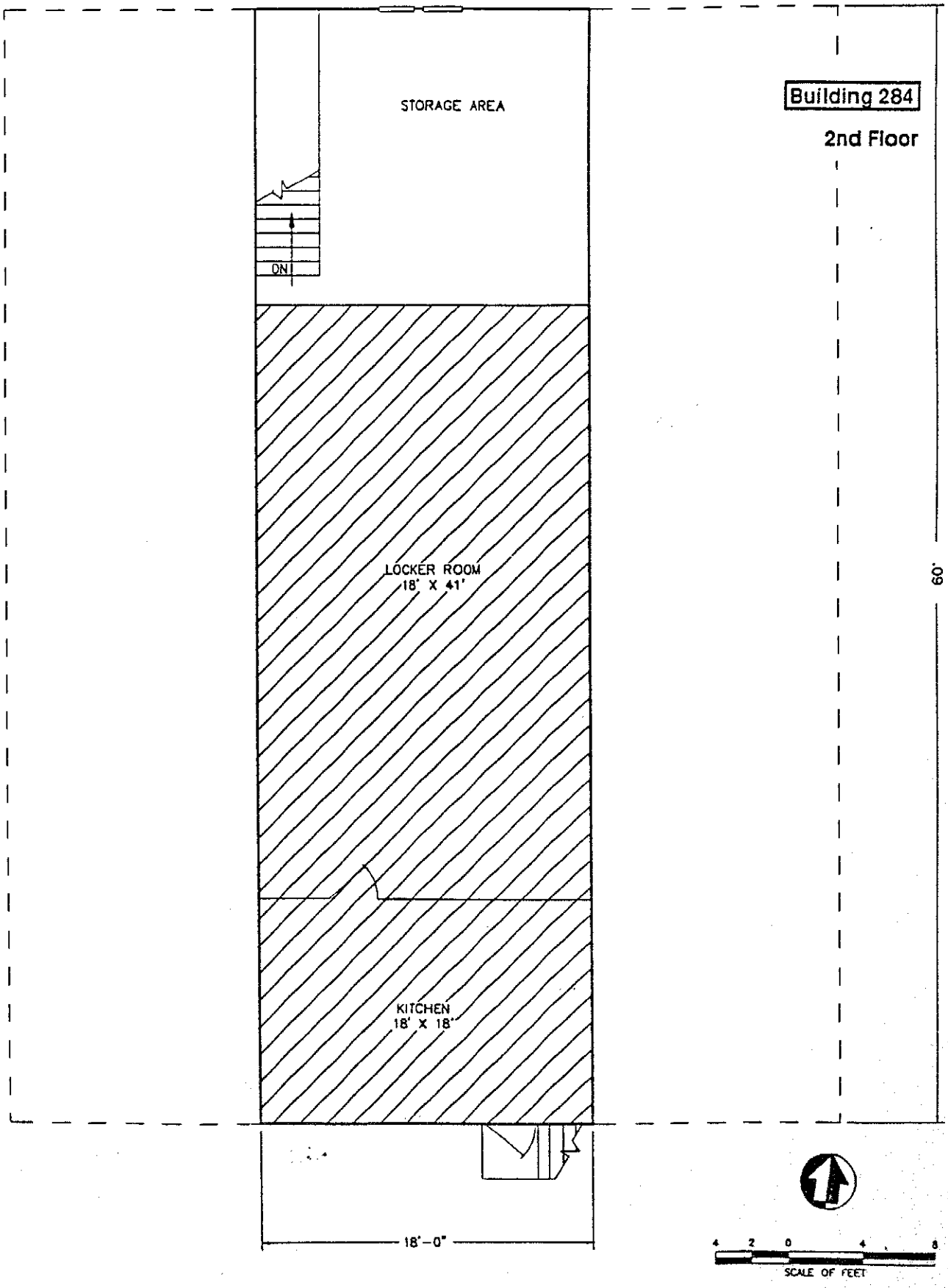
1st Floor



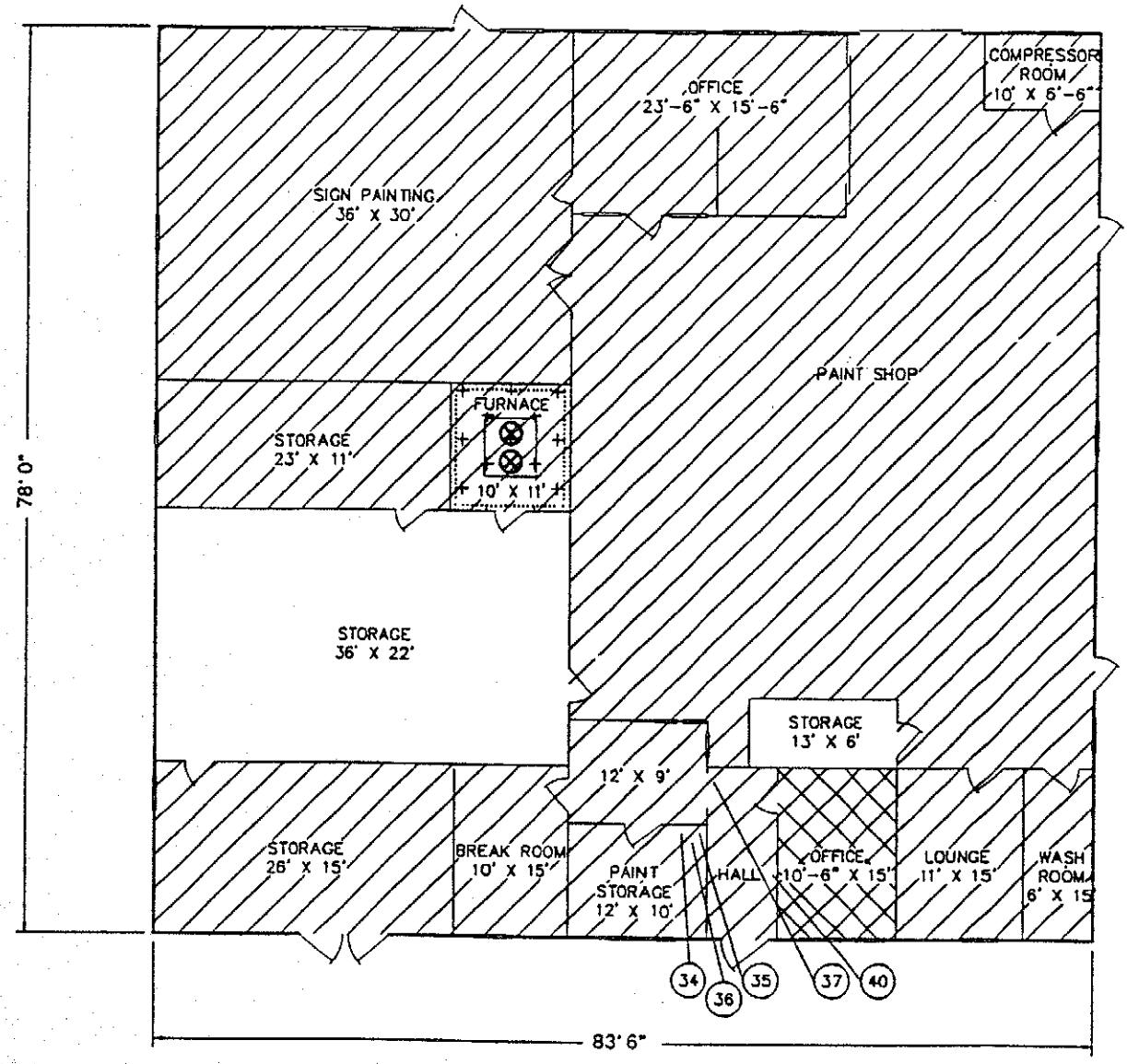

Building 283
2nd Floor
44'
162'
STORAGE
22' X 42'-6"
STORAGE
22' X 58'-6"
FACE OF WALL BELOW
FACE OF WALL BELOW
STORAGE LOFT
DN
DRAFTING ROOM
24' X 38'
38
8' X 12'-6"
PRINT ROOM
23'-6 X 12'-6"
MEN
WOMEN
OFFICE
27'-6 X 12'-6"
OFFICE
11'-6" x 12'-6"
OFFICE
DOWN
TELEPHONE ROOM
24' X 19'-6"
DRAFTING ROOM
24' X 18'
OFFICE
15'-6" x 15'
41
67
DRAFTING OFFICE
62'-6" X 34'-6"
15'-6" x 9'-6"
OFFICE
17' X 15'-6"
17' X 10'
DOWN
OFFICE
14' x 11'
OFFICE
15'-6" x 11'-6"
60' 0"
57
58
56
59
55
132' 6"
164' 6"
16 8 0 16 32
SCALE OF FEET

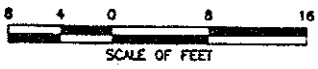
PRESIDIO OF SAN FRANCISCO, DISTRICT ENGINEER'S SHOPS & YARD
(Post Engineer's Shops & Yard)
(Buildings 280, 282-285, 288)
HABS No. CA-2273 (Page 37)




Building 284
2nd Floor
STORAGE AREA
DN
LOCKER ROOM
18' X 41'
KITCHEN
18' X 18'
60'
18'-0"
4 2 0 4 8
SCALE OF FEET

Building 285





~~HABS No. CA-2273 (Page 40)~~

Building 288